

# A NEW SPECIES OF TUCKERELLA (ACARINA, TETRANYCHOIDEA, TUCKERELLIDAE) FROM SOUTH AUSTRALIA

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## SUMMARY

A new species of *Tuckerella* Womersley 1940 belonging to the recently erected family Tuckerellidae (Baker & Pritchard, 1953) is described from *Phyllota* litter from Keith, S.A. A revised key to the three known species is given.

Baker & Pritchard (Ann. Ent. Soc. Amer., 1953, 16: 243-258) have recently removed the genus *Tuckerella* Womersley 1940 from the Tetranychidae and erected the new family Tuckerellidae to include the two species *pavoniformis* (Ewing, 1922) and *ornata* (Tucker, 1926).

In 1940 Womersley recorded *pavoniformis* wrongly under the name of *ornata* Tucker, as pointed out by Baker & Pritchard. The genus *Tuckerella*, however, was based essentially on Tucker's description and figures, and his species is the nominal type.

In their paper Baker & Pritchard separate the two species *pavoniformis* and *ornata* on the number of pairs of whip-like filamentous caudal setae and also on the last row of four palmate setae on the dorsum.

No further occurrences of *pavoniformis* in Australia have been recorded, but a third and new species described in this paper has recently been found. In many respects it is intermediate between *pavoniformis* and *ornata* as is shown in the following key.

### Key to Known Species of *Tuckerella* Wom.

1. Tarsi III and IV with a dorsal sensory rod similar to those on I and II. With 7 pairs of caudal filamentous setae. The four posterior hysterosomal palmate setae small and equal in size.

*T. spechtae* sp. nov.

Tarsi III and IV without such sensory rod

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2. With 6 pairs of caudal filamentous setae. Outer members of posterior row of hysterosomal palmate setae larger than the inner members.

*T. pavoniformis* (Ewing).

With 5 pairs of caudal filamentous setae. All four members of posterior row of hysterosomal palmate setae small and equal in size.

*T. ornata* (Tucker).

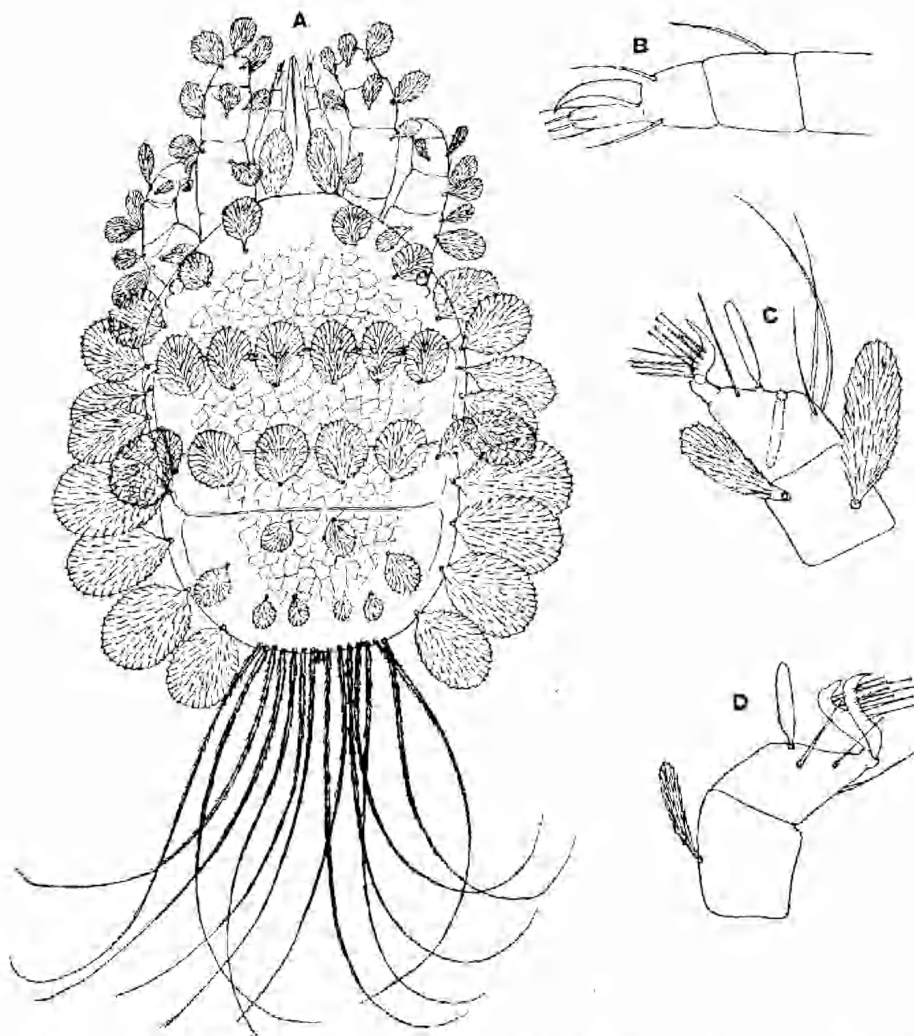
N.B.—In both *ornata* and *spechtae* the two distal sensory rods on tarsi I are about equal in length; in *pavoniformis* the anterior distal sensory rod is very short compared with the posterior distal rod. In the last species tarsus II bears a short antero-distal peg, and leg IV has large, strongly serrate setae dorsally.

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***Tuckerella spechtae* sp. nov.**

Fig. A-D.

*Holotype.—Female.* Size small. Colour in life red. Length of idiosoma  $230\mu$ , width  $150\mu$ . Body roundish oval, widest in line of propodosomal-metapodosomal suture. Dorsum strongly reticulated and with suture lines between



Text Fig. A-D.—*Tuckerella spechtae* sp. nov. A, dorsal view; B, palp; C, tibia and tarsus of leg I; D, same of leg III/IV.

propodosoma and metapodosoma and between the latter and the opisthosoma. Mouth parts elongate with piercing styliform mandibles. Palpi as figured, elongate, four-segmented, tibia with well-developed claw; tarsus cylindrical and barely reaching tip of claw, apparently with 3 setae and two sensory rods. Eyes 2 on each side. Dorsum with 42 palmate or fan-shaped setae as in other species but the four members of the posterior hysterosomal transverse row are all smaller and subequal; with 7 pairs of long, to  $200\mu$ , filamentous, shortly ciliated caudal setae; legs short, I  $112\mu$  long, II, III and IV  $84\mu$ ; furnished with smaller palmate setae; claws strong, furnished with 4 tenent hairs; tarsus I with a pair

of cylindrical sensory rods and 4 simple setae, tarsi II, III and IV each with one such sensory rod. Venter as figured for *pavoniformis* (sic. *ornatus*) Womersley 1940.

*Location*.—A single female, the type, in the South Australian Museum, collected amongst *Phyllota* litter at Keith, South Australia, July, 1953 (Mrs. M. Specht).

*Remarks*.—Distinguished from the other known species as in the key.